

WHAT IS CLAIMED IS:

1. A multimedia modular card inserted into a device for operating the multimedia modular card, comprising:

a bus interface removably connected to the device for operating the multimedia modular card, for transmitting/receiving data to/from the device;

5 a local controller for controlling an operation of the multimedia modular card, according to an input signal from the bus interface; and

a local processor programmed to perform functions corresponding to previously-set multimedia support types, and operated by the local controller.

2. The multimedia modular card according to claim 1, further comprising an external interface unit for connecting the local processor to an external device.

3. The multimedia modular card according to claim 1, wherein the local processor encodes or decodes an audio signal.

4. The multimedia modular card according to claim 1, wherein the local processor encodes or decodes a video signal.

5. The multimedia modular card according to claim 1, wherein the local processor processes Bluetooth communication with other devices performing wireless communication with the device for operating the multimedia modular card.

6. The multimedia modular card according to claim 1, wherein the device for operating the multimedia modular card comprises a display unit, and

the local processor controls the display unit.

7. The multimedia modular card according to claim 1, wherein the local processor performs a data read/write operation according to a read/write signal from the device for operating the multimedia modular card.

8. The multimedia modular card according to claim 1, wherein the local processor is a USB (Universal Serial Bus) controller.

9. The multimedia modular card according to claim 1, wherein the device for operating the multimedia modular card comprises a camera, and the local processor processes a video signal from the camera.

10. A device for operating at least one multimedia modular card, comprising:

an external bus removably connected to said at least one multimedia modular card, for receiving/transmitting data from/to said at least one multimedia modular card;

a main controller for generating a signal for controlling said at least one multimedia modular card through the external bus; and

a bus arbitrator for arbitrating an external bus using right of a plurality of multimedia modular cards, including said at least one multimedia modular card, inserted into the device for operating said at least one multimedia modular card.

11. The device according to claim 10, further comprising an input unit for generating a key input signal of a user, and outputting it to the main controller.

12. The device according to claim 11, wherein, when said at least one multimedia modular card is connected to the external bus, the main controller reads identification information and individual operation conditions from a connected said at least one multimedia modular card, reads an input signal from the input unit, and operates one of said plurality of multimedia modular cards, including said at least one multimedia modular card, corresponding to the input signal.

13. The device according to claim 11, wherein, if the bus arbitrator receives a demand for the external bus using right requested from one of said plurality of multimedia modular cards when none of said plurality of multimedia modular cards are using the external bus, the bus arbitrator provides the external bus using right to said one of said plurality of multimedia modular cards.

14. The device according to claim 11, wherein, if the bus arbitrator receives a demand for the external bus using right requested from one of said plurality of multimedia modular cards when another one of said plurality of multimedia modular cards is using the external bus, the bus arbitrator provides the external bus using right to the requesting said one of said plurality of multimedia modular cards after said another one of said plurality of multimedia modular cards finishes using the external bus.

15. The device according to claim 11, wherein the bus arbitrator stores priorities of said plurality of multimedia modular cards using the external

bus, and provides the external bus using right to one of at least two of said plurality of multimedia modular cards having a higher priority of said at least 5 two of said plurality of multimedia modular cards, when receiving a demand for the external bus using right from said at least two of said plurality of multimedia modular cards.

16. An integrated multimedia system having one or more multimedia modular cards being inserted into a device for operating said one or more multimedia modular cards, wherein each of said one or more multimedia modular cards comprises:

5 a bus interface removably connected to the device for operating said one or more multimedia modular cards, for transmitting/receiving data to/from the device for operating said one or more multimedia modular cards;

a local controller for controlling an operation of said one or more multimedia modular cards, according to an input signal from the bus interface;

10 and

a local processor programmed to perform functions corresponding to previously-set multimedia support types, and operated by the local controller; and

15 wherein the device for operating said one or more multimedia modular cards, comprises:

an external bus interface removably connected to said one or more multimedia modular cards, for receiving/transmitting data to/from said one or

more multimedia modular cards;

20 a main controller for generating a signal for controlling said one or more multimedia modular cards through an external bus; and

a bus arbitrator for arbitrating an external bus using right of a plurality of multimedia modular cards, including said one or more multimedia modular cards, inserted into the device for operating said one or more multimedia modular cards.

17. The integrated multimedia system according to claim 16, further comprising an external interface unit for connecting the local processor to an external device.

18. The integrated multimedia system according to claim 16, wherein the local processor encodes or decodes an audio signal.

19. The integrated multimedia system according to claim 16, wherein the local processor encodes or decodes a video signal.

20. The integrated multimedia system according to claim 16, wherein the local processor processes Bluetooth communication with other devices performing wireless communication with the device for operating said one or more multimedia modular cards.

21. The integrated multimedia system according to claim 16, wherein the device for operating said one or more multimedia modular cards comprises a display unit, and the local processor controls the display unit.

22. The integrated multimedia system according to claim 16,

wherein the local processor performs a data read/write operation, according to a read/write signal from the device for operating said one or more multimedia modular cards.

23. The integrated multimedia system according to claim 16, wherein the local processor is a USB controller.

24. The integrated multimedia system according to claim 16, wherein the device for operating said one or more multimedia modular cards comprises a camera, and the local processor processes a video signal from the camera.

25. The integrated multimedia system according to claim 16, wherein the device for operating said one or more multimedia modular cards further comprises an input unit for generating a key input signal of a user, and outputting it to the main controller.

26. The integrated multimedia system according to claim 25, wherein the main controller reads an input signal from the input unit, and operates one of said plurality of multimedia modular cards, corresponding to the signal.

27. The integrated multimedia system according to claim 16, wherein the external bus interface comprises:

a plurality of connection ports where said one or more multimedia modular cards are correspondingly inserted; and

5 switch units correspondingly connected to the plurality of connection

ports, and turned off when said one or more multimedia modular cards are correspondingly inserted.

28. The integrated multimedia system according to claim 27, wherein, when said one or more multimedia modular cards are correspondingly inserted into the plurality of connection ports, adjacent ones of said one or more multimedia modular cards are connected in a row through signal lines for 5 demanding use of the external bus and signal lines for allowing use of the external bus.

29. The integrated multimedia system according to claim 28, wherein, when at least one of said one or more multimedia modular cards correspondingly inserted into the plurality of connection ports and connected to one another, are removed, at least one of the switch units corresponding to 5 removed said at least one of said one or more multimedia modular cards, is turned on, and at least one of the signal lines connected to the removed said at least one of said one or more multimedia modular cards, are connected to said at least one of the switch units.

30. The integrated multimedia system according to claim 16, wherein, when at least two of said plurality of multimedia modular cards are inserted into the device for operating said one or more multimedia modular cards, one of said at least two of said plurality of multimedia modular cards 5 demands use of the external bus, and performs a master function for controlling another one of said at least two of said plurality of multimedia modular cards.

31. The integrated multimedia system according to claim 16, wherein, when at least two of said plurality of multimedia modular cards are inserted into the device for operating said one or more multimedia modular cards, one of said at least two of said plurality of multimedia modular cards 5 performs a slave function to be controlled by another of said at least two of said plurality of multimedia modular cards.

32. The integrated multimedia system according to claim 16, wherein, if the bus arbitrator receives a demand for the external bus using right requested from one of said plurality of multimedia modular cards, including said one or more multimedia modular cards, when none of said plurality of 5 multimedia modular cards are using the external bus, the bus arbitrator provides the external bus using right to the requesting said one of said plurality of multimedia modular cards.

33. The integrated multimedia system according to claim 16, wherein, if the bus arbitrator receives a demand for the external bus using right requested from one of said plurality of multimedia modular cards, including said one or more multimedia modular cards, when another one of said plurality 5 of multimedia modular cards is using the external bus, the bus arbitrator provides the external bus using right to requesting said one of said plurality of multimedia modular cards after said another one of said plurality of multimedia modular cards finishes using the external bus.

34. The integrated multimedia system according to claim 16,

wherein the bus arbitrator stores priorities of said plurality of multimedia modular cards, including said one or more multimedia modular cards, using the external bus, and provides the external bus using right to one of at least two of
5 said plurality of multimedia modular cards having a higher priority of said at least two of said plurality of multimedia modular cards, when receiving the demand for the external bus using right from said at least two of said plurality of multimedia modular cards.

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